

## **REMARKS/ARGUMENTS**

### **I. INTRODUCTION**

Claim 1 has been amended, with claims 2 and 8-11 being cancelled. Accordingly, claims 1 and 3-7 remain under consideration in this application. Reexamination and reconsideration is hereby respectfully requested.

Claim 1 has been amended (in step (b)) to more clearly specify the link between the analysis of the microphone signals, on the one hand, and the output change in the signal processing, on the other hand. The basis for amendment may be found throughout the application as originally filed. No new matter has been introduced.

### **II. REJECTION OF CLAIMS UNDER 35 U.S.C. § 103**

Claims 1, 3-5 and 7 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Krokstad et al. ("*Krokstad*" U.S. Pat. No. 5,276,739) in view of Arcos et al. ("*Arcos*" U.S. Pat. No. 5,396,560). Applicant respectfully traverses the rejection.

According to the Office Action, *Krokstad* meets the steps of "(a) analyzing the signals..." and "(b) changing the signal processing . . ." because "since the casing being touched changes the processing of the microphone signals, there has to be some kind of analytical link between the microphone signals and the casing being touched." Claim 1 has been amended to clarify that the changing of the signal processing by the signal processing unit occurs "when a change in the difference over time in short term energy between the first and second microphone signals exceeds a threshold, wherein the threshold is selected so as to detect when said casing is being touched." Claim 1 requires that the physical event of "touching of the casing" be detected based on the short term energy changes in the dual microphone outputs, not based on the actuation of a keypad switch, which is how the system in *Krokstad* is described. As to *Krokstad*, one need not guess (nor would it be appropriate to guess) how the changes in the operation of the hearing aid are commanded, since *Krokstad* is express and very specific that such changes happen when the keypad switch (SW) is touched.

In this regard, *Krokstad* specifically states at column 12, lines 52-56, that "By a light touch on the control keypad the user will access a new set of parameters for a specific response function from the memory RAM2 in the hearing aid's control section and input it to the digital signal processor DSP. ...". There can be no doubt that the changes that occur in the processing in *Krokstad* are due to a keypad press, and not due to assessing microphone signals, as claimed.

In addition, the rejection of claim 1 is based on the combination of *Krokstad* and *Arcos*, and in this regard, even were it proper to combine the two references (which it is not), the hypothetical combination would still not teach all the limitations. Specifically, neither *Krokstad* nor *Arcos* teach determining "a change in the difference over time in the short term energy between the first and second microphone signals", much less compare such a change against a threshold, as claimed. While *Arcos* discloses a single "short term energy" block 22 for a single microphone 12, *Arcos* does not disclose either a second microphone or a second "short term energy" block as required. According to the Office Action, *Arcos* meets the above-limitation because *Arcos* discloses "calculating the short term energy between two transducers" (Page 2, paragraph 1). Applicant respectfully disagrees.

Claim 1 recites first and second *microphones*, not first and second *transducers*, the latter term *transducer* not being used in the claims. In the *Arcos* reference (Fig. 1 reproduced below), the item onto which the recited "second microphone" is being read is an output device (receiver 18), which cannot meet the required, recited "microphone".

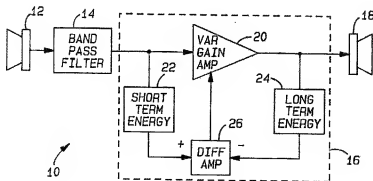


Fig - 1

Moreover, *Arcos* clearly only determine at most a difference between “short term energy” (block 22) of a microphone 12 and “long term energy” (block 24) of a variable gain amplifier output (not of a second microphone), so *Arcos* does not meet determining a change in the difference over time in the short term energy between first and second microphone signals, as claimed.

For at least these reasons, Applicant respectfully submits that the rejection of claim 1 has been traversed and respectfully requests that it be reconsidered and withdrawn.

Claims 3-7 depend (directly or indirectly) from claim 1 and thus include all the limitations thereof. Thus, for at least the same reasons given above in connection with claim 1, Applicant respectfully submits that the rejection has been traversed and respectfully requests that it be reconsidered and withdrawn.

### **III. REJECTION OF CLAIMS UNDER 35 U.S.C. § 103**

Claim 6 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Krokstad et al. (“*Krokstad*” U.S. Pat. No. 5,276,739) in view of *Arcos* et al. (“*Arcos*” U.S. Pat. No. 5,396,560), and further in view of Le Bel (“*Le Bel*”, U.S. Pat. No. 6,307,482). Applicant respectfully traverses the rejection.

Claim 6 depends from claim 1 (indirectly) and thus include all the limitations thereof. Thus, for at least the same reasons given above in connection with claim 1, Applicant respectfully submits that the rejection has been traversed and respectfully requests that it be reconsidered and withdrawn.

#### **IV. CONCLUSION**

All presently pending claims are now believed allowable. If the Examiner has any questions or concerns, the Examiner is invited to contact Applicant's undersigned attorney. To the extent that any additional fees are due, please charge our Deposit Account No. 04-2223 (under order 66,722-087).

Respectfully submitted,

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